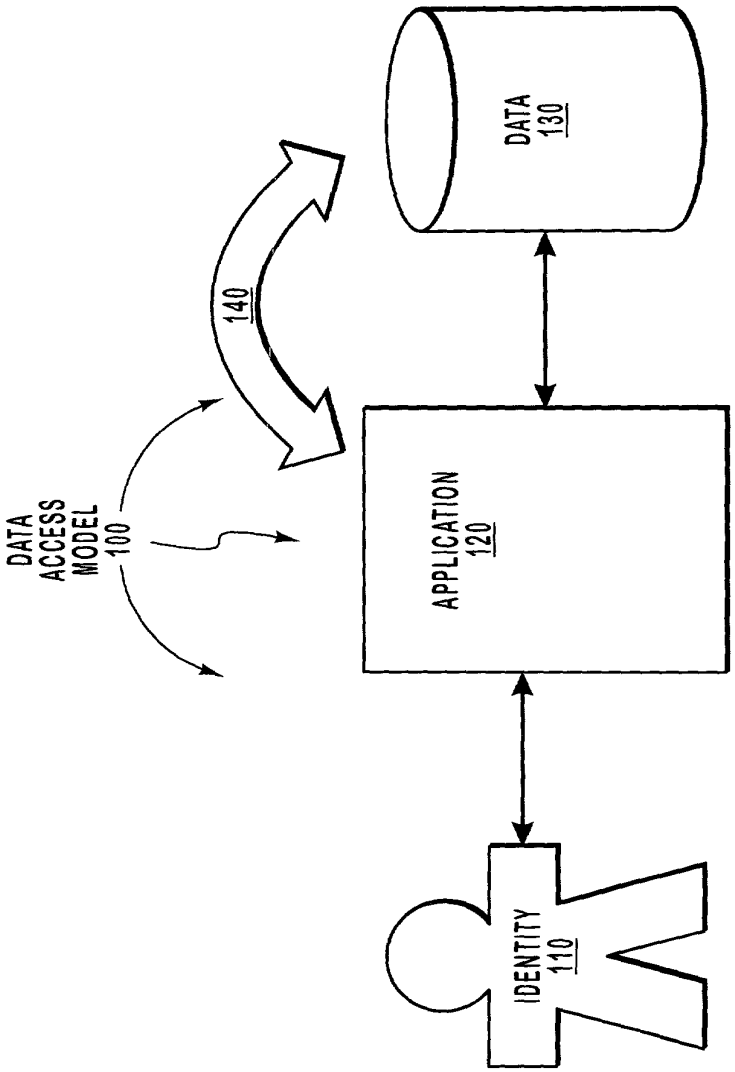

FIG. 1
(PRIOR ART)

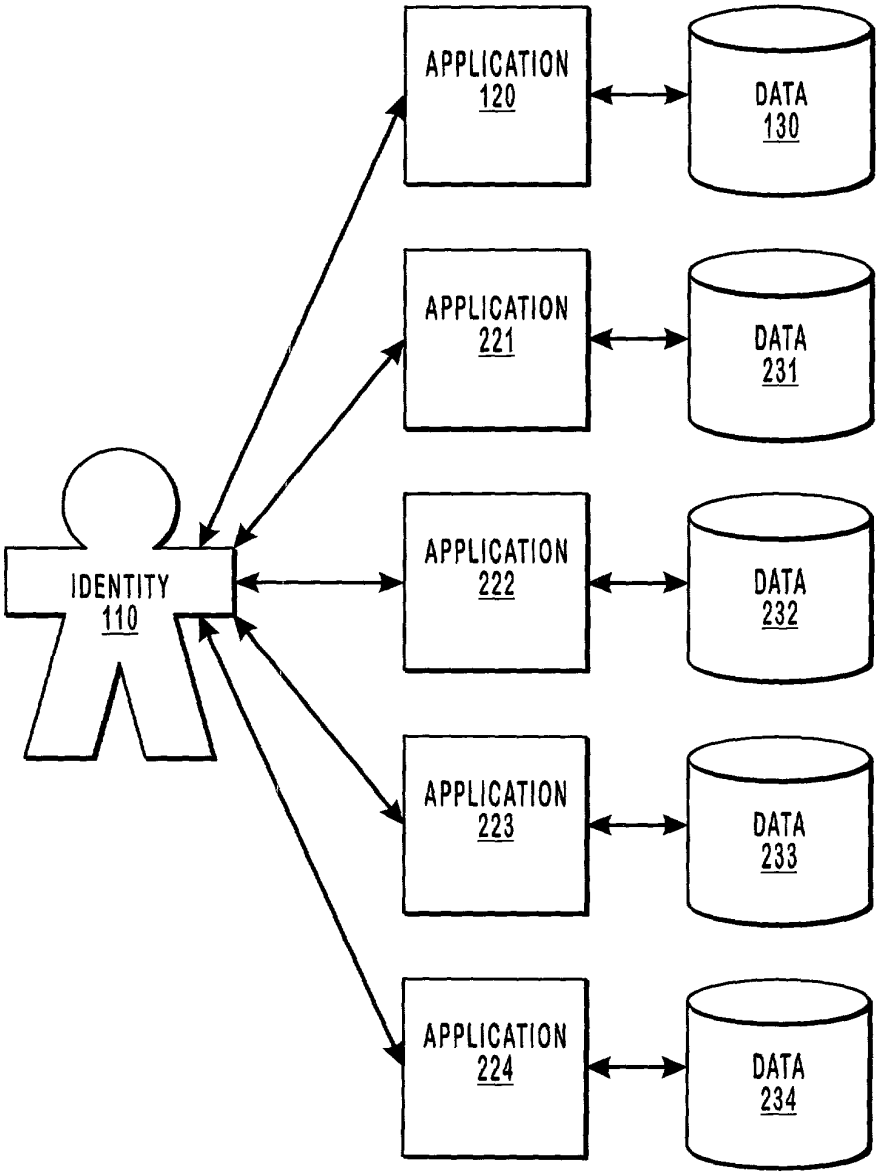

FIG. 2
(PRIOR ART)

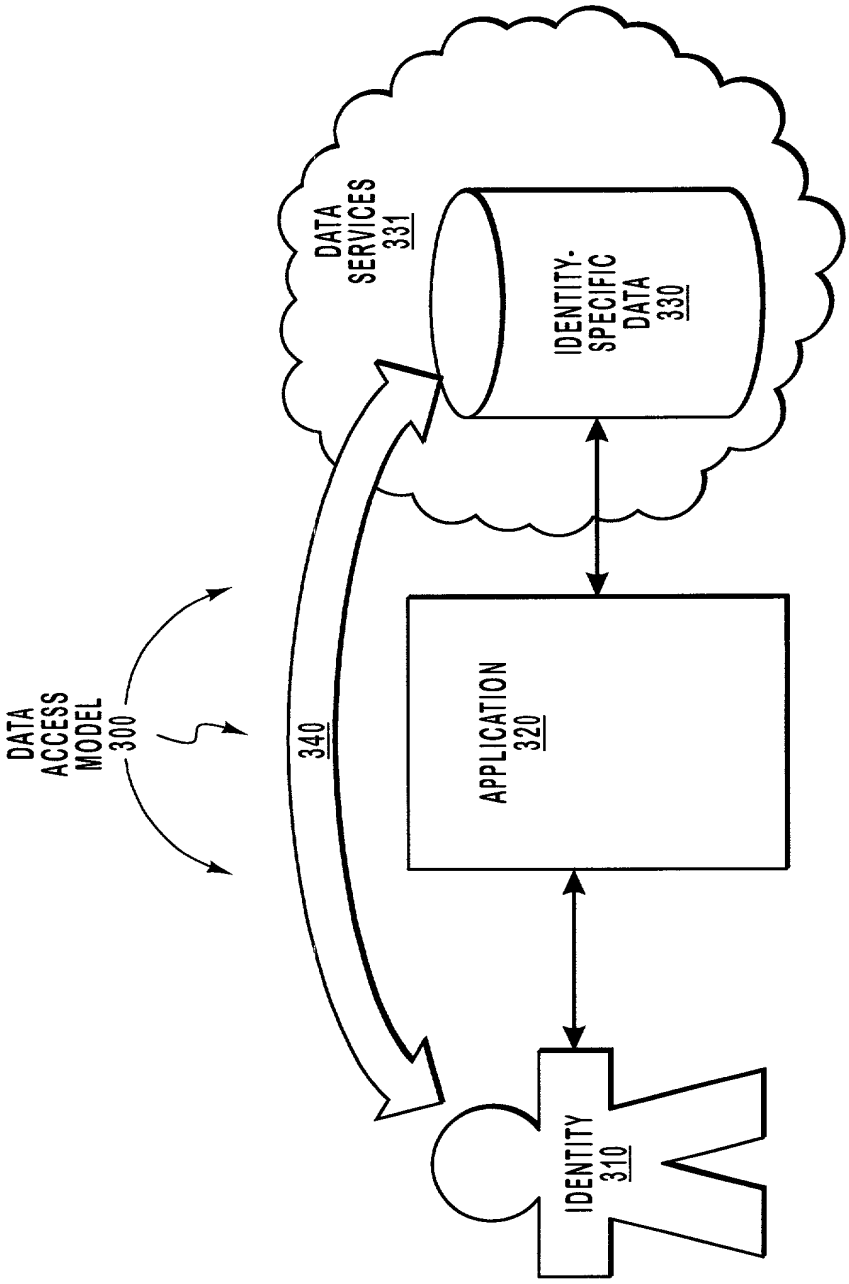
DATA SERVICES 331
IDENTITY-SPECIFIC DATA 330
APPLICATION 320
IDENTITY 310
DATA ACCESS MODEL 300
340

FIG. 3

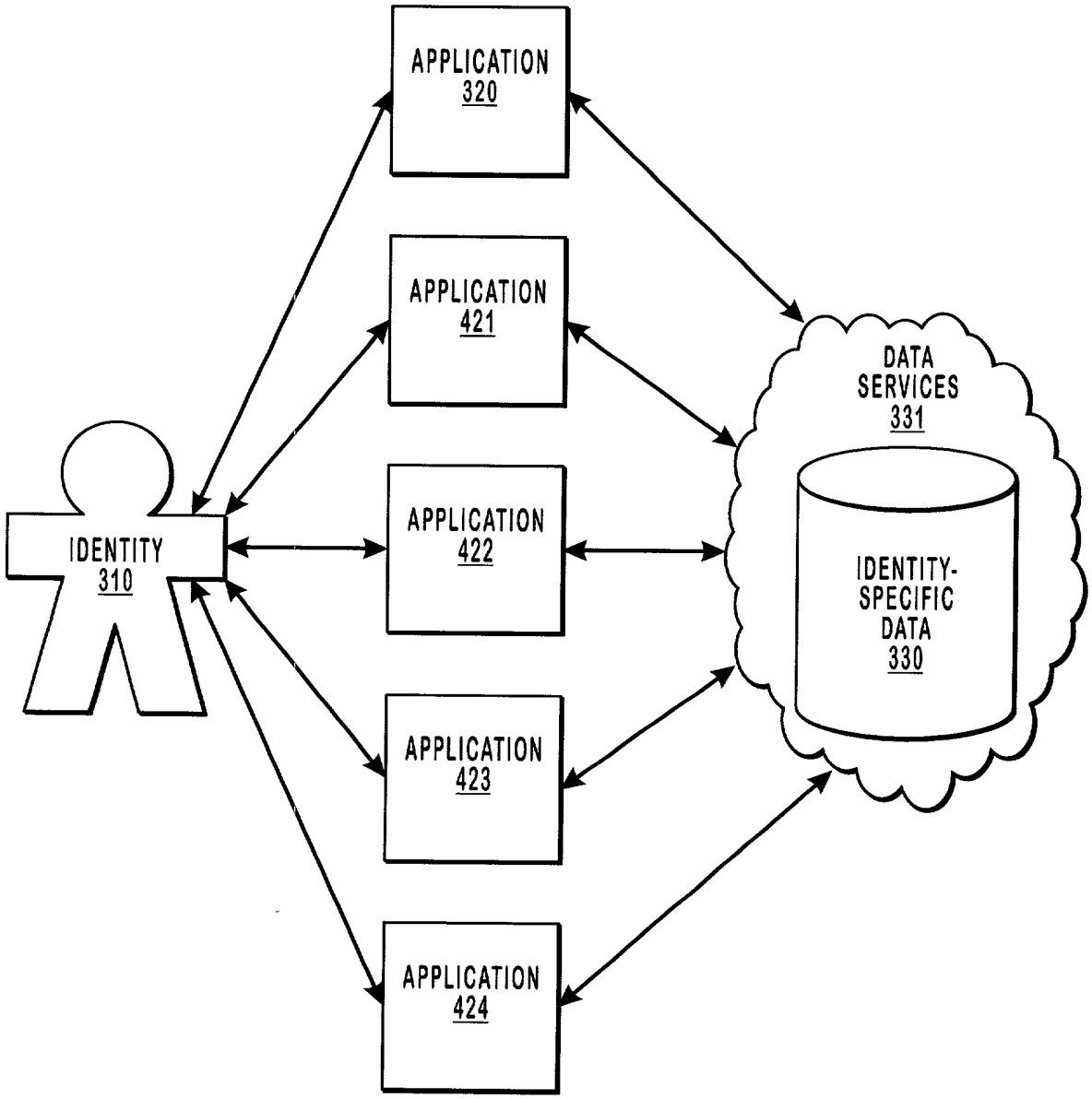
APPLICATION
320
APPLICATION
421
APPLICATION
422
APPLICATION
423
APPLICATION
424
IDENTITY
310
DATA
SERVICES
331
IDENTITY-
SPECIFIC
DATA
330

FIG. 4

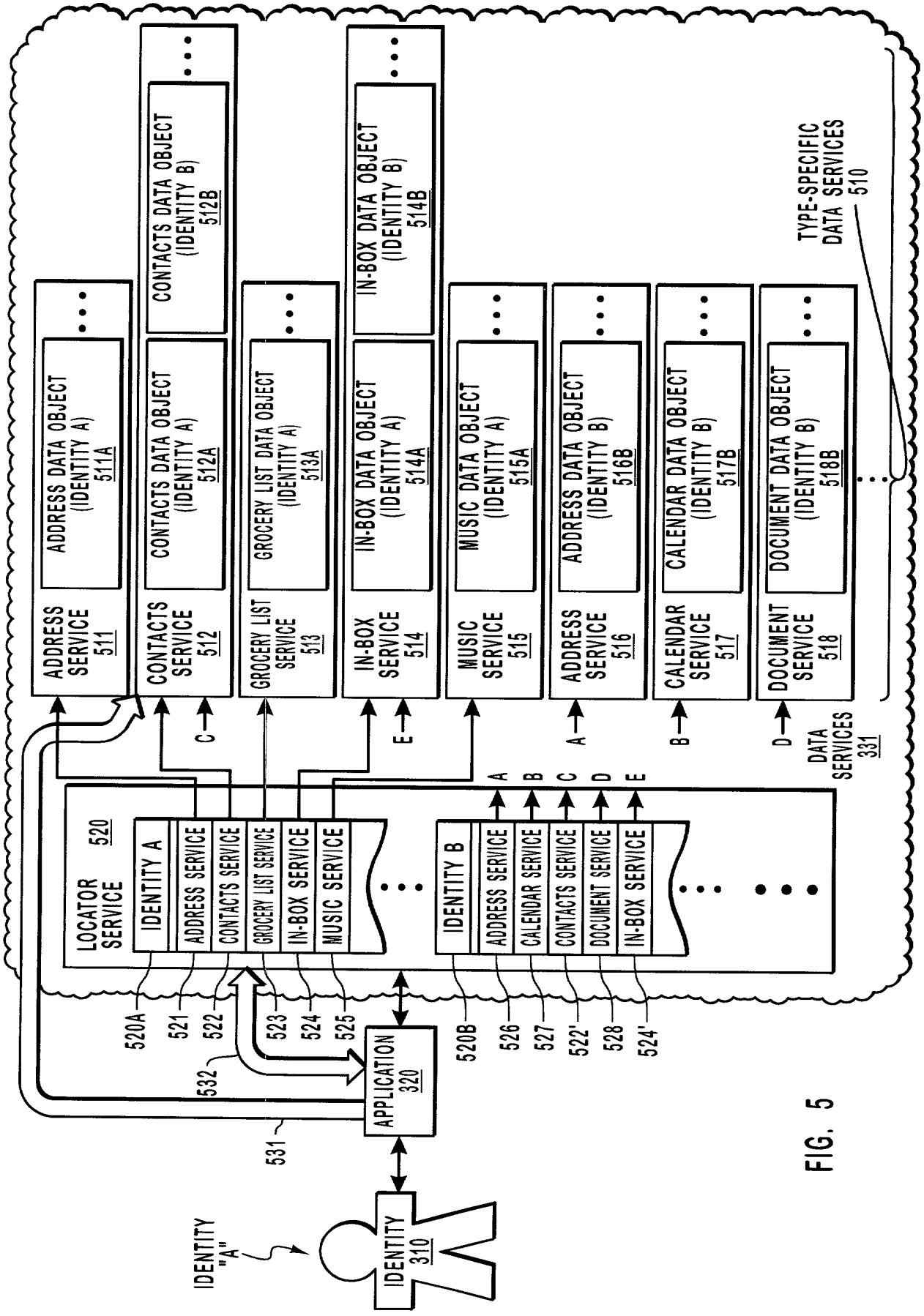
ADDRESS SERVICE 511
ADDRESS DATA OBJECT (IDENTITY A) 511A
CONTACTS SERVICE 512
CONTACTS DATA OBJECT (IDENTITY A) 512A
CONTACTS DATA OBJECT (IDENTITY B) 512B
GROCERY LIST SERVICE 513
GROCERY LIST DATA OBJECT (IDENTITY A) 513A
IN-BOX SERVICE 514
IN-BOX DATA OBJECT (IDENTITY A) 514A
IN-BOX DATA OBJECT (IDENTITY B) 514B
MUSIC SERVICE 515
MUSIC DATA OBJECT (IDENTITY A) 515A
ADDRESS SERVICE 516
ADDRESS DATA OBJECT (IDENTITY B) 516B
CALENDAR SERVICE 517
CALENDAR DATA OBJECT (IDENTITY B) 517B
DOCUMENT SERVICE 518
DOCUMENT DATA OBJECT (IDENTITY B) 518B
TYPE-SPECIFIC DATA SERVICES 510
DATA SERVICES 331
LOCATOR SERVICE 520
IDENTITY A
ADDRESS SERVICE
CONTACTS SERVICE
GROCERY LIST SERVICE
IN-BOX SERVICE
MUSIC SERVICE
IDENTITY B
ADDRESS SERVICE
CALENDAR SERVICE
CONTACTS SERVICE
DOCUMENT SERVICE
IN-BOX SERVICE
A
B
C
D
E
520A
521
522
523
524
525
520B
526
527
522'
528
524'
532
531
APPLICATION 320
IDENTITY 310
IDENTITY "A"

FIG. 5

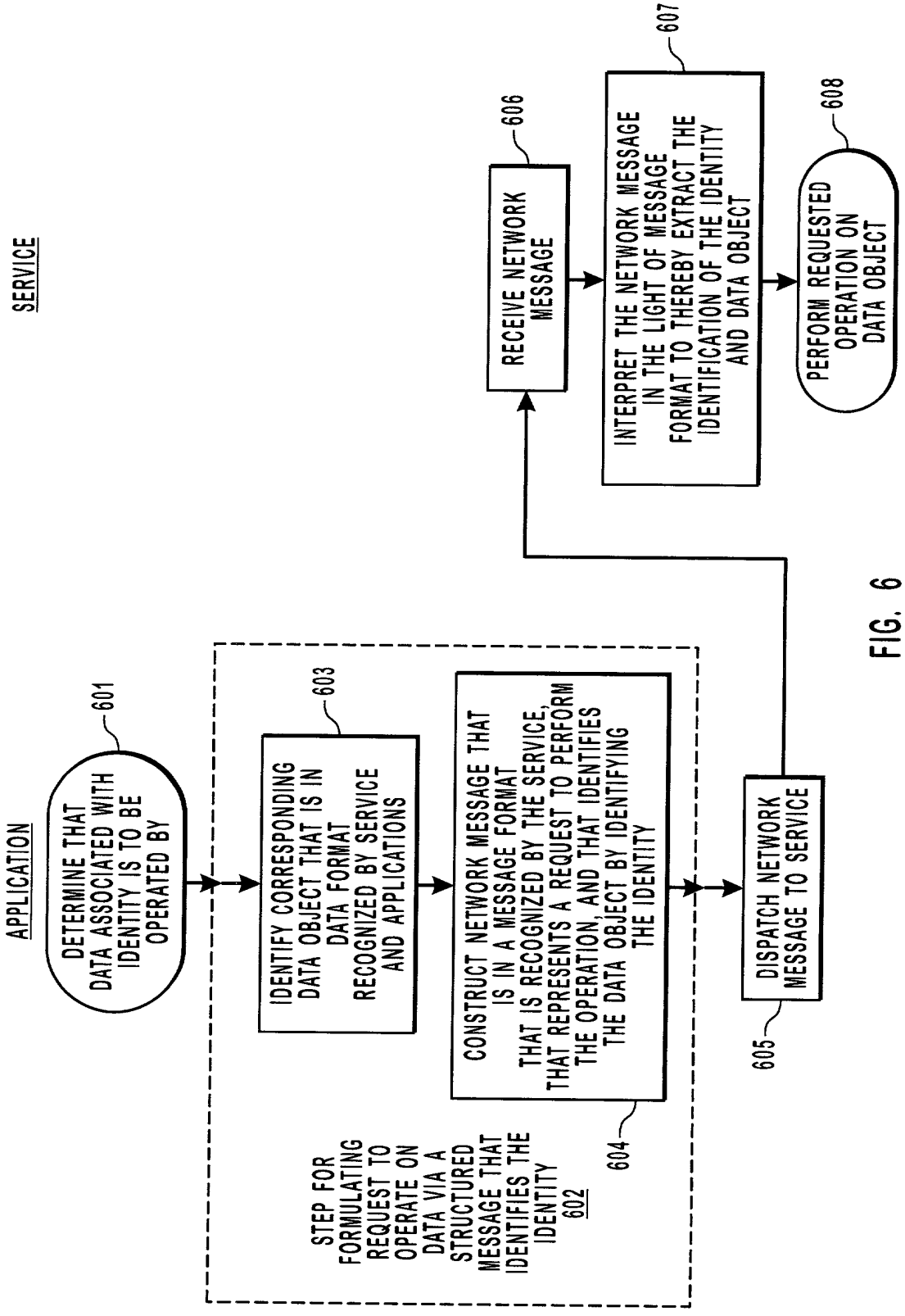
APPLICATION
SERVICE
DETERMINE THAT DATA ASSOCIATED WITH IDENTITY IS TO BE OPERATED BY
601
IDENTIFY CORRESPONDING DATA OBJECT THAT IS IN DATA FORMAT RECOGNIZED BY SERVICE AND APPLICATIONS
603
CONSTRUCT NETWORK MESSAGE THAT IS IN A MESSAGE FORMAT THAT IS RECOGNIZED BY THE SERVICE, THAT REPRESENTS A REQUEST TO PERFORM THE OPERATION, AND THAT IDENTIFIES THE DATA OBJECT BY IDENTIFYING THE IDENTITY
604
STEP FOR FORMULATING REQUEST TO OPERATE ON DATA VIA A STRUCTURED MESSAGE THAT IDENTIFIES THE IDENTITY
602
DISPATCH NETWORK MESSAGE TO SERVICE
605
RECEIVE NETWORK MESSAGE
606
INTERPRET THE NETWORK MESSAGE IN THE LIGHT OF MESSAGE FORMAT TO THEREBY EXTRACT THE IDENTIFICATION OF THE IDENTITY AND DATA OBJECT
607
PERFORM REQUESTED OPERATION ON DATA OBJECT
608

FIG. 6

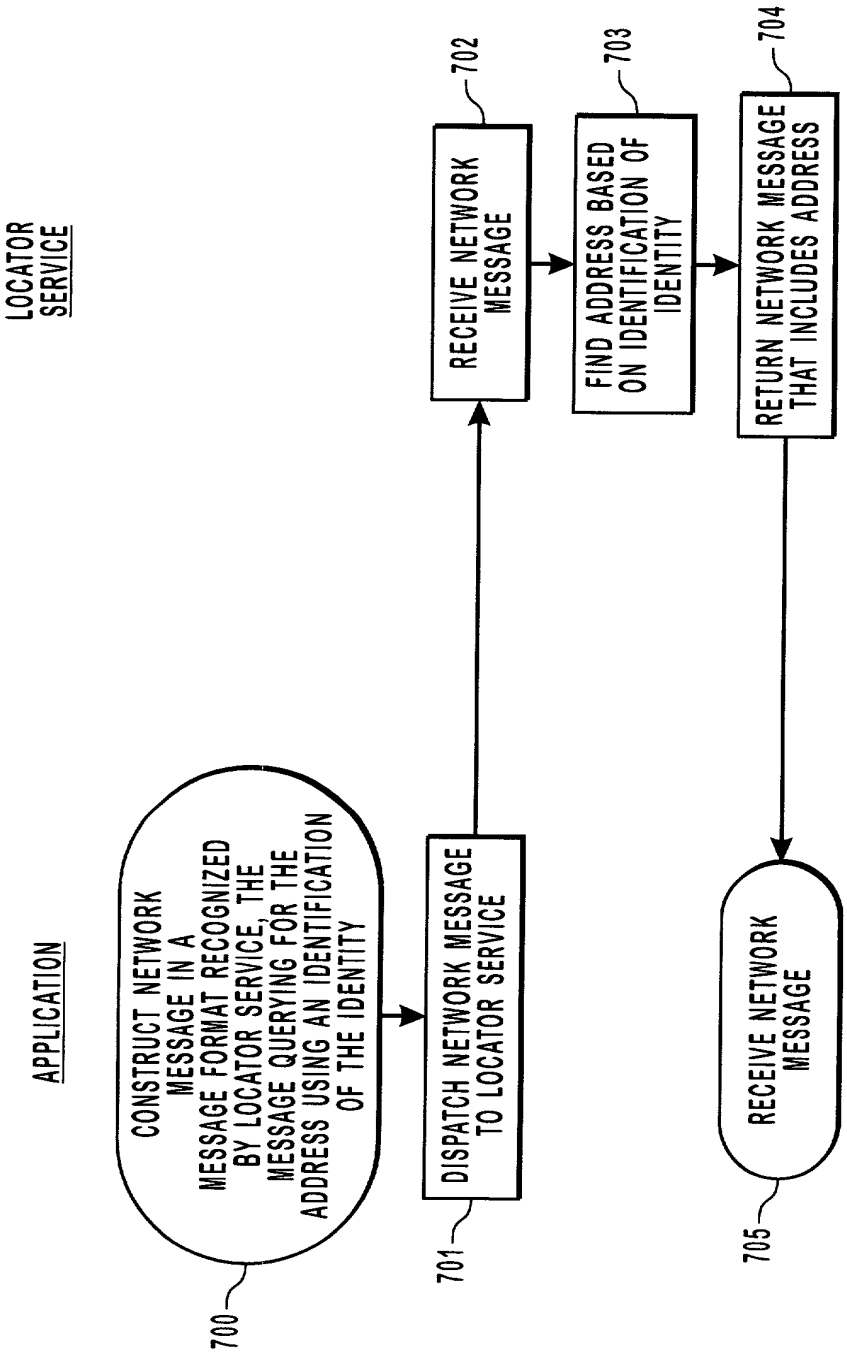
APPLICATION
LOCATOR SERVICE
CONSTRUCT NETWORK MESSAGE IN A MESSAGE FORMAT RECOGNIZED BY LOCATOR SERVICE, THE MESSAGE QUERYING FOR THE ADDRESS USING AN IDENTIFICATION OF THE IDENTITY
700
DISPATCH NETWORK MESSAGE TO LOCATOR SERVICE
701
RECEIVE NETWORK MESSAGE
702
FIND ADDRESS BASED ON IDENTIFICATION OF IDENTITY
703
RETURN NETWORK MESSAGE THAT INCLUDES ADDRESS
704
RECEIVE NETWORK MESSAGE
705

FIG. 7

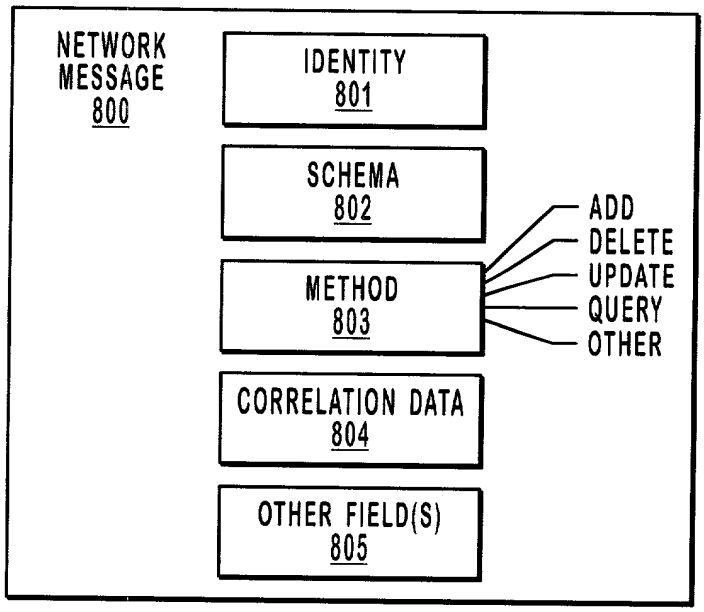
NETWORK MESSAGE 800
IDENTITY 801
SCHEMA 802
METHOD 803
ADD
DELETE
UPDATE
QUERY
OTHER
CORRELATION DATA 804
OTHER FIELD(S) 805

FIG. 8

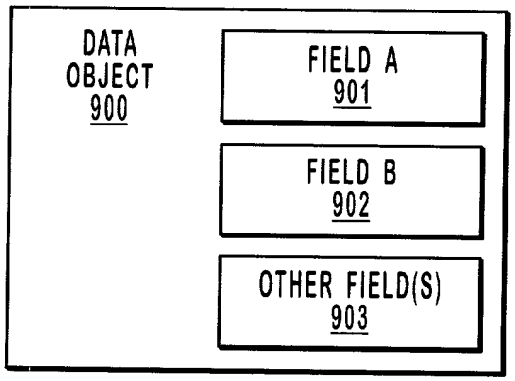
DATA OBJECT 900
FIELD A 901
FIELD B 902
OTHER FIELD(S) 903

FIG. 9

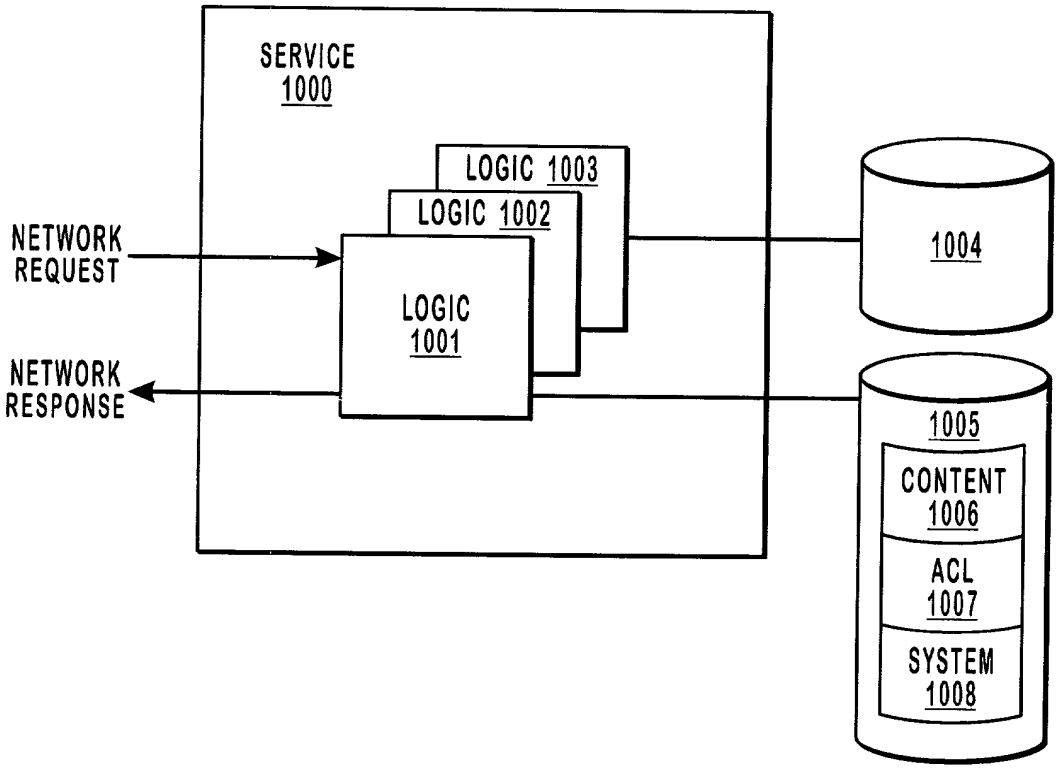
SERVICE
1000
LOGIC 1003
LOGIC 1002
LOGIC
1001
NETWORK
REQUEST
NETWORK
RESPONSE
1004
1005
CONTENT
1006
ACL
1007
SYSTEM
1008

FIG. 10

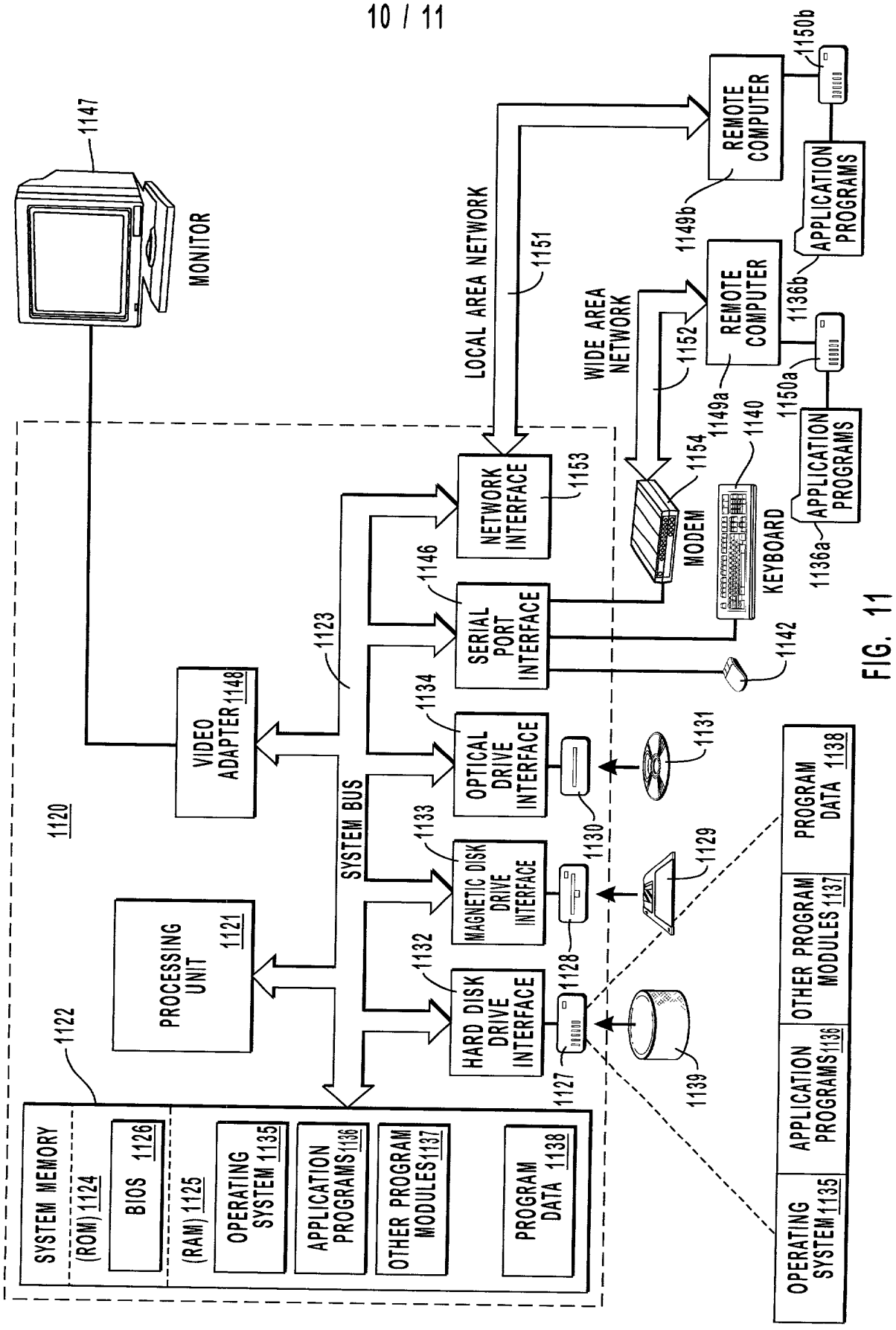
1147
MONITOR
1120
SYSTEM BUS
VIDEO ADAPTER 1148
PROCESSING UNIT 1121
SYSTEM MEMORY 1122
(ROM) 1124
BIOS 1126
(RAM) 1125
OPERATING SYSTEM 1135
APPLICATION PROGRAMS 1136
OTHER PROGRAM MODULES 1137
PROGRAM DATA 1138
1123
1127
HARD DISK DRIVE INTERFACE 1132
1128
MAGNETIC DISK DRIVE INTERFACE 1133
1130
OPTICAL DRIVE INTERFACE 1134
1131
SERIAL PORT INTERFACE 1146
1142
NETWORK INTERFACE 1153
LOCAL AREA NETWORK 1151
WIDE AREA NETWORK 1152
MODEM 1154
KEYBOARD 1140
1149a
REMOTE COMPUTER
1136a
APPLICATION PROGRAMS
1150a
1136b
1149b
REMOTE COMPUTER
APPLICATION PROGRAMS
1150b
1139
1129
OPERATING SYSTEM 1135
APPLICATION PROGRAMS 1136
OTHER PROGRAM MODULES 1137
PROGRAM DATA 1138

FIG. 11

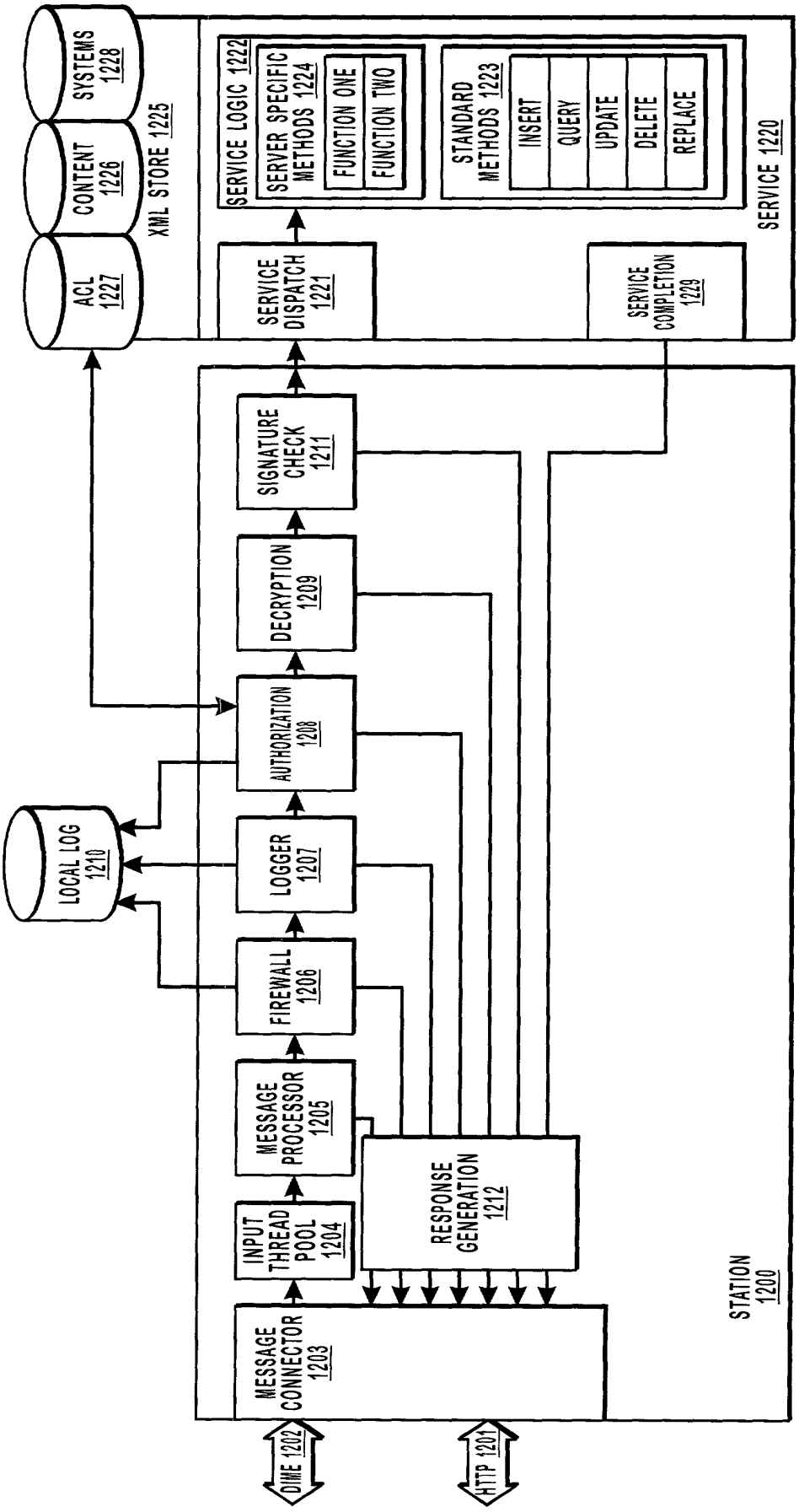
SYSTEMS 1228
CONTENT 1226
ACL 1227
XML STORE 1225
SERVICE LOGIC 1222
SERVER SPECIFIC METHODS 1224
FUNCTION ONE
FUNCTION TWO
STANDARD METHODS 1223
INSERT
QUERY
UPDATE
DELETE
REPLACE
SERVICE 1220
SERVICE DISPATCH 1221
SERVICE COMPLETION 1229
SIGNATURE CHECK 1211
DECRYPTION 1209
AUTHORIZATION 1208
LOCAL LOG 1210
LOGGER 1207
FIREWALL 1206
MESSAGE PROCESSOR 1205
INPUT THREAD POOL 1204
RESPONSE GENERATION 1212
MESSAGE CONNECTOR 1203
STATION 1200
DIME 1202
HTTP 1201

FIG. 12